Stanford



Francesca Vacante

Instructor, Cardiovascular Institute

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

HONORS AND AWARDS

- K99/R00 Pathway to Independence Award, National Institutes of Health (NIH), NHLBI (2026-2031)
- Early Career Poster Award, American Heart Association Basic Cardiovascular Science (BCVS) Council (2026)
- Stanford Cardiovascular Institute Travel Award, Stanford Cardiovascular Institute (SCVI) (2026)
- Travel Grant for Early Career Investigators, Arteriosclerosis, Thrombosis and Vascular Biology (ATVB) (2026)
- Young Scientist Award in Basic Research, Vascular Pharmacology (2025)
- Stanford Cardiovascular Institute Recognition Award, Stanford Cardiovascular Institute (2025)
- Stanford Postdoc Champion Award, Stanford University (2025)
- DIVERSITY AND INCLUSION INNOVATION FUNDS (DIF) Award, Stanford University, Stanford Office of the Vice Provost for Graduate Education (2024-2025)
- Poster Award, Cardiovascular Conference Stanford-Arizona-Morehouse-Alabama, Stanford Cardiovascular Institute (2024)
- Next-Gen Researcher Pilot Award, Chan-Zuckerberg Initiative (CZI) (2023)
- iTPA Translation Innovation Springboard, Edinburgh Innovations (2022)
- Cardiology Award, Cardiovascular Science, Edinburgh University (2021)
- Roger Wathsworth Award, British Society for Cardiovascular Research (2021)
- REA Pump Priming Award, British Heart Foundation (2020)
- iTPA Institutional Translational Partnership Award, Edinburgh Innovations (2020)
- Best Poster Award, European Vascular Biology Organization (EVBO) (2019)
- Innovation Challenge, Deanery of Clinical Sciences Funding, Edinburgh University (2018)
- Travel Award British Heart Foundation Excellence CoRE, British Heart Foundation (2018)
- Travel Award, RNA Society (2018)
- Studentship, British Heart Foundation Award FS/18/10/33413 (2018)
- Conference Travel Award, British Heart Foundation Excellence CoRE (2017)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Editorial Board Member, Vascular Pharmacology (2025 - present)
- Board Member, AHA Young Professionals Bay Area Division (2025 - present)

- Member, Inflammation and Heart Failure Committee, Council on Basic Cardiovascular Science, American Heart Association (2025 - present)
- Funder, President, Stanford Inspiring Women in Science and Healthcare (iWISH-Talks) (2025 - present)

PATENTS

- Francesca Vacante, Andrew H. Baker. "United States Patent PCT/GB2023/051524 Activation of noncoding host gene loci.", Edinburgh University, Sep 1, 2023

LINKS

- iWISH-Talks: https://med.stanford.edu/cvi/events/iwish-talks.html

Publications

PUBLICATIONS

- **Δ9-THC Promotes Profibrotic Cell States In Vitro and Impairs Vascular Function In Vivo.** *Arteriosclerosis, thrombosis, and vascular biology*
  Jimenez-Tellez, N., Vacante, F., Tsarouchas, T. M., Juguilon, C., Casas-Ortiz, A., Chandy, M., Wei, T. T., Wu, J. C.
  2026

- **Multimodal atlas of human atherosclerosis links granular vascular cell states to coronary artery disease risk.** *medRxiv : the preprint server for health sciences*
  Mosquera, J. V., Tang, I., Murach, M., Auguste, G., Kodali, A., Hart, P., Shaw, D. M., Li, M., Turner, A. W., Hodonsky, C. J., Dworak, N. M., de Oliveira, A. K., Sol-Church, et al
  2026

- **NEREA: A versatile computer vision-based software for analyzing angiogenesis.** *Cardiovascular research*
  Jimenez-Tellez, N., Casas-Ortiz, A., Vacante, F., Yang, X., Obejero-Paz, C., Wu, J. C.
  2026

- **Leadership as a DIAMOND: Connecting People for a Global Impact with iWISH** *Atherosclerosis, Thrombosis and Vascular Biology*
  Talozzi, L., Mitic, T., Yildirim, Z., Vacante, F.
  2026

- **The LncRNA MYRACL Regulates Human Oligodendrocyte Maturation and Myelination.** *Molecular therapy : the journal of the American Society of Gene Therapy*
  Tsarouchas, T. M., Vacante, F., Kazakou, N. L., Wagstaff, L., Bennett, M., Zoupi, L., Gibson, E. M., Baker, A. H., Williams, A.
  2025

- **Effective Transcriptional Induction of the CARMN/miR-143/145 Complex Locus in Smooth Muscle Cells Using CRISPR Activation.** *Arteriosclerosis, thrombosis, and vascular biology*
  Vacante, F., Sanchez-Esteban, S., Tsarouchas, T., Rodor, J., Bennett, M., Carroll, M. S., Beqqali, A., Baker, A. H.
  2025

- **Generation of two induced pluripotent stem cell lines from patients with Facioscapulohumeral muscular dystrophy.** *Stem cell research*
  Venkateshappa, R., Vacante, F., Xu, L., Canel-Rivero, G., Day, J. W., Wu, J. C.
  2025; 87: 103794

- **Targeting Cis-regulatory elements for CRISPR-mediated transcriptional activation of the human MIR503HG locus.** *Vascular pharmacology*
  Monteiro, J. P., Vacante, F., De Pace, A., Bennett, M., Rodor, J., O'Carroll, D., Wu, J. C., Quertermous, T., Baker, A. H.
  2025: 107521

- **Framework for Cultivating Leadership and Driving Growth.** *Circulation*
  Vacante, F., Yildirim, Z., Wu, J. C.
  2025; 151 (7): 430-432

- **Functional screening identifies miRNAs with a novel function inhibiting vascular smooth muscle cell proliferation.** *Molecular therapy : the journal of the American Society of Gene Therapy*
  Rodor, J., Klimi, E., Brown, S. D., Krilis, G., Braga, L., Ring, N. A., Ballantyne, M. D., Kesidou, D., Nguyen Dinh Cat, A., Miscianinov, V., Vacante, F., Miteva, K., Bennett, et al
  2025; 33 (2): 615-630

- **Effective CRISPR modulation of complex non-coding RNA loci.** *Nature reviews. Cardiology*
  Vacante, F., Baker, A. H.
  2025
- **Protocol to study electrophysiological properties of hPSC-derived 3D cardiac organoids using MEA and sharp electrode techniques.** *STAR protocols*
  Venkateshappa, R., Yildirim, Z., Zhao, S. R., Wu, M. A., Vacante, F., Abilez, O. J., Wu, J. C.
  2024; 5 (4): 103406
- **Generation of Marfan syndrome-specific induced pluripotent stem cells harboring FBN1 mutations.** *Stem cell research*
  Vacante, F., Venkateshappa, R., Htet, M., Yan, C., Wu, J. C.
  2024; 80: 103518
- **Lnc-ing epicardium-derived cells to cardiac remodelling: lncRNA-TARID as a novel antifibrotic option.** *European heart journal*
  Wu, X., Vacante, F., Wu, J. C.
  2023
- **CARMN Loss Regulates Smooth Muscle Cells and Accelerates Atherosclerosis in Mice.** *Circulation research*
  Vacante, F., Rodor, J., Lalwani, M. K., Mahmoud, A. D., Bennett, M., De Pace, A. L., Miller, E., Van Kuijk, K., de Bruijn, J., Gijbels, M., Williams, T. C., Clark, M. B., Scanlon, et al
  2021; 128 (9): 1258-1275
- **The function of miR-143, miR-145 and the MiR-143 host gene in cardiovascular development and disease.** *Vascular pharmacology*
  Vacante, F., Denby, L., Sluimer, J. C., Baker, A. H.
  2019; 112: 24-30